

ABSTRACT

A method for establishing error tolerance in a processing system is described. Error tolerance has been advanced by allowing autonomous processes to dynamically assign themselves unique, platform-independent identities upon their creation. The invention allows for the automated creation of backup processes, which automatically replace existing primary processes that have disappeared. Each individual process maintains surveillance of other processes. If one process is lost, the other processes are independently advised of this occurrence, allowing them to replace the lost process. The invention further provides for the consistent flow of backup processes based on each type of service. If a predetermined period of time lapses without a response from a primary process, one of the backup processes, which is of the same service type, will quickly replace the lost process. This backup process, which has now become a primary process, is replaced with a newly created backup process.